

In 11-19-02

**PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Diab, et al. ) Group Art Unit 3736

Appl. No. : 09/547,588 )

Filed : April 11, 2000 )

For : IMPROVED SIGNAL | NOV 1 3 2002

PROCESSING APPARATUS | TECHNOLOGY CENTER R3700

Examiner : Eric Frank Winakur

## AMENDMENT IN RESPONSE TO THE OCTOBER 3, 2002 OFFICE ACTION

United States Patent and Trademark Office P.O. Box 2327 Arlington, VA 22202

Dear Sir:

In response to the Office Action dated October 3, 2002. Applicants respectfully submit the following amendments and comments in connection with the above-captioned application.

## IN THE CLAIMS:

Please cancel Claim 1, without prejudice.

Please add new claims 31-52 as follows:

31. A physiological monitor for monitoring a pulserate of a living being, said monitor comprising a signal processor configured to:

transform a time-domain plethysmograph dataset into a spectral-domain dataset; identify a plurality of spectral peaks in said spectral domain waveform; and sort said plurality of spectral peaks into one or more spectral peaks corresponding to a fundamental frequency and one or more harmonics of said fundamental frequency, and estimate a pulserate from said fundamental frequency and said one or more harmonics.

32. The physiological monitor of Claim 31, wherein said signal processor is configured to sort said spectral peaks according to one or more rules.